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Brookhaven Scientists Create New Ways to Tag and Track Molecules

- Metallic “tags” to label proteins and other molecules are being developed at the Lab. They will expand the toolbox scientists use to decode molecular structures, diagnose and treat diseases, and trace the movement of antibodies and drugs within cells.
- Some applications already in use:
 - Metal particles are used in home pregnancy test kits, producing the readable pink color when proteins associated with pregnancy are present.
 - Gold-labeled molecules follow the delivery of an antifungal drug into its target cells.
 - A metallic tag helped identify one of the key infection-initiating proteins on the surface of the hepatitis B virus. This knowledge might eventually lead to ways to defeat the virus.

Brookhaven’s “Big Bang” Images Featured in Millennium Art Exhibit

- Science and art will collide with a bang in an exhibit open through March 6, 2000, at Manhattan’s Paine Webber Art Gallery, 1285 Avenue of the Americas.
- Images in the exhibit, produced by scientists at the Laboratory, are computer simulations based on data scientists expect to generate when they begin collisions of gold atoms at the Lab’s Relativistic Heavy Ion Collider (RHIC) this year.
- To view some of the images, visit www.ccd.bnl.gov/visualization/gallery/au_on_au.

Removal Action Alternative Study Released on January 28th

- The public is invited to comment during February on the alternatives being considered to remediate the Brookhaven Graphite Research Reactor.
- A workshop explaining this document will be held on February 1, 2000. Walk-in anytime between 4:30 to 7:30 p.m. in Berkner Hall at the Laboratory. An “open-house” question-and-answer session will be held on February 16 from 3:00 to 6:30 p.m. at the Brookhaven Graphite Research Reactor at the Laboratory. Call Jen Clodius, (631)344-2489 for more information or for a copy of the executive summary.
- The draft is available on the web at: www.bgrr.bnl.gov, and at the public libraries in Middle Island and Shirley.

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Long Island Weather 1999 – A Tie for the Third Hottest Year on Record

- The Lab has been keeping meteorological records since 1949 – and temperatures were above normal in every month of 1999 except for October.
- Snowfall was lighter than usual, and Long Island had no major storms causing severe damage.

Upcoming Events, Free and Open to the Public

- The following concerts and lectures will be held at Brookhaven's Berkner Hall.

At noon:

- February 2 - Zoe Browder, piano (special performance before Carnegie Hall debut).
- February 9 - The Stony Brook Piano Trio performing works by Beethoven and Schumann.
- February 23 - To be announced. Call (631)344-4066 for more information.

At 4:00 p.m.:

- March 8 - Roderick MacKinnon, M.D., professor from The Rockefeller University and investigator from Howard Hughes Medical Institute, will give a lecture on "Exploring Potassium Channels: A Key to Understanding the Nervous System."
- March 29 – Garman Harbottle, Ph.D., chemist at Brookhaven National Laboratory, will give a lecture on "The Origins of Chinese Civilization: Recent Archaeological Discoveries."

Did You Know?

- *There are only five multi-purpose DOE national laboratories in the United States.*
- *The U.S. Department of Energy's laboratories help support American leadership in science and technology.*
- *More than 30,000 scientists and engineers at DOE labs conduct breakthrough research in energy sciences and technology, high energy physics, superconducting materials, accelerator technologies, material sciences, and environmental sciences in support of DOE's mission.*

Watch for [Laboratory Link](#) for the latest news about Brookhaven National Laboratory research.